

REMARKS

Amended Claim 14 now incorporates the limitations of the presently cancelled Claims 1, 2, 5 and 12.

The rejection of Claim 2 under Section 112 is believed addressed by the present amendment. All the claims in the application include the limitation respecting the ratio "Z".

Claims 9 and 10 stand rejected under 35 U.S.C. 112 second paragraph. Claim 9 is directed to an embodiment where the vinyl(co)polymer (C) is composed of "50 to 99 wt. % of at least one of styrene, α -methyl styrene, p-methyl styrene, p-chlorostyrene and **methacrylic acid(C₁-C₈)-alkylates** and

1 to 50 wt. % of at least one of vinyl cyanides, **(meth)acrylic acid-(C₁-C₈)-alkylate**, unsaturated carboxylic acids and derivatives of unsaturated carboxylic acids".

The Examiner asserts the claim to be internally inconsistent.

Applicants call attention to that the claim recites (co)polymers entailing both homopolymers as well as copolymers. Homopolymers of a single methacrylic acid alkylate are thus embraced as copolymers of different methacrylic acid alkylates. The claim is respectfully submitted to be clear and free of any inconsistency.

Similarly addressed and believed overcome is the rejection of Claim 10.

As presently amended, the claimed invention is directed to a flame resistant molding composition that contains

polycarbonate (and/or polyester),

an impact strength modifier that includes a rubber portion (B_a) and a rubber free portion,

an optional vinyl(co)polymer and/or polyalkyleneterephthalate, and a phosphorous compound.

The inventive composition contains (B_b) that is a rubber free portion of vinyl (co)polymer. The source of (B_b) being component B and the optional component C. The invention is predicted on the finding that the impact properties of the composition depend Z, a material parameter defined as the ratio (B_a)/(B_b).

According to the invention Z is required to be greater than 1.

Accordingly, flame resistant compositions that typically feature inferior impact performance (see the enclosed declaration by Eckel) exhibit improved strength in the instances where Z is greater than 1.

The Eckel declaration includes data demonstrating the criticality of Z in the present context. Compositions wherein Z is lower than 1 feature characteristically low notched Izod impact strengths at low temperatures.

Claims 2 and 4 stand rejected under 35 U.S.C. 102(b) as anticipated, or in the alternative under 35 U.S.C. 103 (a), as obvious over Wittmann (U.S. Patent 5,679,759).

Wittmann disclosed compositions containing a polycarbonate or polyester carbonate, a graft polymer and a vinyl(co)polymer.

Nothing is apparent in the Wittmann document relative to the parameter "Z" and none of the examples meet the stated requirement in respect to Z. As such, the reference falls short of anticipating the claims as presently amended. Moreover, nothing in Wittmann suggests Z or its criticality in the present context.

The present amendment is believed to address and overcome the rejections over Wittmann.

Claims 1-4, 6, 9-11 and 13 stand rejected under 35 U.S.C. 102(b) as anticipated or in the alternative under 35 U.S.C. 103 (a) as obvious over Eckel (U.S. Patent 4,985,493).

Eckel disclosed compositions containing polyester carbonate and a graft polymer yet nothing in Eckel describes the parameter Z. As such Eckel cannot validly be said to anticipate the claims. Note that Eckel's Example 9 lacks the presently required phosphorous compound and therefore falls short of anticipating the claims.

There is no evidence that Eckel recognized much less suggested the criticality of Z.

The present amendment is believed to address and overcome the rejections over Eckel.

Claims 1-4, 6, 9-11 and 13 stand rejected under 35 U.S.C. 102(b) as anticipated or in the alternative under 35 U.S.C. 103 (a) as obvious over Grigo (U.S. Patent 5,100,960).

Grigo disclosed compositions containing polycarbonate and a grafted rubber. Nothing in Grigo describes the parameter Z and as such the reference cannot be validly said to anticipate the claims.

Example 9, singled out by the Examiner, falls short of anticipating in that it includes no phosphorous compound, a required component of the presently claimed composition.

The present amendment is believed to address and overcome the rejections over Grigo.

Claims 1-4, 6, 9-11 and 13 stand rejected under 35 U.S.C. 102(b) as anticipated or in the alternative under 35 U.S.C. 103 (a) as obvious over Dufour (U.S. Patent 5,061,754).

Dufour disclosed compositions containing polycarbonate and a graft polymer. There is nothing in the document to describe the presently required parameter "Z". None of the exemplified blends contain the phosphorous compound, a required component of the presently claimed composition. The rejection alleging anticipation is clearly untenable.

There is nothing in Dufour to suggest the Z parameter that characterizes the claimed invention.

The present amendment is believed to address and overcome the rejections over Dufour.

Claims 1-4, 6, 9-11 and 13 stand rejected under 35 U.S.C. 102(b) as anticipated or in the alternative under 35 U.S.C. 103 (a) as obvious over Grigo (U.S. Patent 5,026,758).

Grigo falls short of anticipating the present claims in that it shares the shortcomings of the documents discussed above. None of the exemplified blends contain the phosphorous compound, a required component of the presently claimed composition.

There is nothing in Grigo to describe or suggest the Z parameter that characterizes the claimed invention.

The present amendment is believed to address and overcome the rejections over Grigo.

Claims 1-4, 6, 9-11 and 13 stand rejected under 35 U.S.C. 102(b) as anticipated or in the alternative under 35 U.S.C. 103 (a) as obvious over Eckel et al (U.S. Patent 5,126,404).

Eckel et al falls short of anticipating the present claims in that it discloses nothing relative to "Z". None of the exemplified blends contain the phosphorous compound, a required component of the presently claimed composition.

There is nothing in Eckel to describe or suggest the Z parameter that characterizes the claimed invention.

The present amendment is believed to address and overcome the rejections over Eckel.

Claims 1- 13 stand rejected under 35 U.S.C. 102(b) as anticipated or in the alternative under 35 U.S.C. 103 (a) as obvious over Gosens et al (U.S. Patent 5,204,394).

Gosens disclosed a composition containing polycarbonate, styrene containing copolymer and/or a graft polymer and a flame retardant. Gosens does not describe the parameter "Z" nor is there a description or suggestion of the presently recited limitation relative to the notched impact strength at -20 °C.

Claims 1-13 stand rejected under 35 U.S.C. 103(a) said to be unpatentable over Eckel '493 or Grigo '960 or Eckel '404 in view of Gosens '394.

The invention is predicated on the finding that the flame retardance and notched impact strength at low temperature of the recited composition depends on the parameter "Z". As discussed above, this dependence has not been described nor suggested in any of the cited art. Nor is the combination of Eckel '493 or Grigo '960 or Eckel '404 with Gosens '394 describe or suggest this dependence.

The rejection sounding in obviousness is requested to be reconsidered and withdrawn in light of the above.

Believing the above represent a complete response to the Office Action and that the application is in condition for allowance, applicants request the earliest issuance of an indication to this effect.

Respectfully submitted,

By _____


Aron Preis
Attorney for Applicant(s)
Reg. No. 29,426

Bayer Polymers LLC
100 Bayer Road
Pittsburgh, Pennsylvania 15205-9741
(412) 777-3814
FACSIMILE PHONE NUMBER:
(412) 777-3902
s:\ksl\6623amend